

6. A method according to claim 5 wherein the sputtering is performed by an RF sputtering method.
7. A method according to claim 5 wherein the semiconductor device is incorporated into an active matrix display device.
8. A method according to claim 5 wherein the atmosphere contains nitrogen at 75 volume% or more and argon at 25 volume% or less.
9. A method for manufacturing a semiconductor device comprising the steps of:  
forming an insulating film comprising silicon nitride over a semiconductor by sputtering in an atmosphere consisting essentially of nitrogen; and  
forming an electrode comprising aluminum over the insulating film.
10. A method according to claim 9 wherein the sputtering is performed by an RF sputtering method.
11. A method according to claim 9 wherein the semiconductor device is incorporated into an active matrix display device.
12. A method for manufacturing a semiconductor device comprising the steps of:  
forming an insulating film comprising silicon nitride over a semiconductor by sputtering in an atmosphere consisting of nitrogen and argon; and  
forming an electrode comprising aluminum over the insulating film.
13. A method according to claim 12 wherein the sputtering is performed by an RF sputtering method.

14. A method according to claim 12 wherein the semiconductor device is incorporated into an active matrix display device.
15. A method according to claim 12 wherein the atmosphere contains nitrogen at 75 volume% or more and argon at 25 volume% or less.
16. A method for manufacturing a semiconductor device comprising the step of:
  - forming a transistor; and
  - forming an insulating film comprising silicon nitride over the transistor by sputtering in an atmosphere consisting essentially of nitrogen.
17. A method according to claim 16 wherein the sputtering is performed by an RF sputtering method.
18. A method according to claim 16 wherein the semiconductor device is incorporated into an active matrix display device.
19. A method for manufacturing a semiconductor device comprising the step of:
  - forming a transistor; and
  - forming an insulating film comprising silicon nitride over the transistor by sputtering in an atmosphere consisting of nitrogen and argon.
20. A method according to claim 19 wherein the sputtering is performed by an RF sputtering method.
21. A method according to claim 19 wherein the semiconductor device is incorporated into an active matrix display device.